Vol XLVIII
No. 3

ISSN 0019-5014

CONFERENCE
NUMBER

JULY-
SEPTEMBER
1993

INDIAN JOURNAL OF AGRICULTURAL ECONOMICS

INDIAN SOCIETY OF
AGRICULTURAL ECONOMICS,
BOMBAY

Ind. Jn. of Agri. Econ.
Vol. 48, No. 3, July-Sept. 1993

RAPPORTEURS' REPORTS

Rapporteur's Report on Agricultural Wages and Employment

Rapporteur: S.R. Subramanian*

Agriculture continues to be the prime sector of Indian economy in spite of the rapid progress made in other sectors. Agriculture absorbs the unemployed workforce of the economy. Though a breakthrough in agricultural production technology was made in the mid-1960s, unemployment and under-employment still prevail in agriculture. There is a perceptible migration of labour force from rural to urban areas. It is a paradox that one could witness scarcity of labour for agriculture, on the one hand, and unemployment, on the other. The recent liberalisation policy of the government has given a fillip to agricultural exports especially horticultural crops. Government has sponsored a number of programmes like Integrated Rural Development Programme (IRDP), Rural Landless Employment Guarantee Programme (RLEGP), Jawahar Rozgar Yojana (JRY) to uplift the levels of living of the rural poor. In spite of all these efforts, nearly one-third of the population of the country still lives below poverty line. Under these circumstances, it is necessary to have a look at the various facets of agricultural employment related issues.

Twenty-five papers have been accepted for discussion on this subject. The first four papers discussed below centred around the effect of new economic policy; relationship of wages, area, production and productivity; gender difference in work participation; and models for wage determination.

Amalesh Banerjee has argued that the new economic policy is a structural reform with short run stabilisation. Reduction in subsidies would lead to reduction in production and labour absorption and result in price rise. Foreign investment in agro-processing will lead to destruction of cottage industries. He has emphasised that what is needed is land reform and decentralised planning to improve agriculture in India. There exists a close relationship with wages and productivity. R.K. Pandey and Ashok Kumar have analysed the structure of wages of rural workers and its relationship with area, production and productivity of major crops in Orissa. They have shown that real agricultural wage rate for male labour varied significantly between the different states in the country and between years. Real wage rate increased over the years in all the states. Over the years, it is found that there is a tendency for equalisation of wage rates of men and women labourers in agriculture. The effect of wage rate on rice output was positive in many districts of Orissa. Similar relationship was observed in rice yield and area also. Usha Rani *et al.* have made a critical study of gender differential in work participation in crop and livestock enterprise in Rajasthan. They found that there is an inverse relationship between labour days used and the size of holding. Farm operations like weeding, harvesting and threshing absorbed nearly 80 per cent of the labour used in crop enterprise. The study has established gender differential in work participation. In livestock enterprise, utilisation of female labour was higher than that of males in all the operations. Women of well-to-do families were less involved in agricultural operations. Though there is legislation fixing minimum wages for agriculture, S. Senthilnathan and S.

* Professor and Head, Department of Agricultural Economics, Centre for Agricultural and Rural Development Studies, Tamil Nadu Agricultural University, Coimbatore.

Varadarajan have argued that it hardly benefits the labour. Looking at the social aspect of labour, one should use fair wage or need based wage. They have discussed the various theories in fixing wages and analysed the wage received for its fairness and stability. They have made an empirical verification of this using the date collected from a sample rice farms in Tamil Nadu. The marginal product of family and casual labour was above the mean wage. Though the price elasticity of demand was significant, the wage elasticity of demand was not significant. Market equilibrium wage and the wage to meet annual consumption expenditure were very close. They concluded that the average of minimum wage and marginal value product will be a fair wage for agricultural labourers.

The remaining 21 papers are broadly classified under the following heads for the purpose of discussion: wages and employment; wages, production and productivity; impact of technology on employment; income and levels of living; gender difference in work participation; employment in agricultural and non-agricultural sectors; and agriculture and industrial wages.

Wages and Employment

In his paper, H.R. Sharma has observed that between 1956-57 and 1983, though the money wages of both male and female have increased, the real wage declined between 1977-78 and 1983. The male/female real wage earning differential declined over the years. But the number of employment days available was found higher in 1983 than in 1957. Puran Chand *et al.* have observed that in Punjab and Haryana money wage rates were higher during 1970-73 to 1990-92, but the real wage rates were lower in 1980-83 as compared to 1970-73. There existed wage differentials over space and time. The actual wage received was lower than the statutory wage rate in Andhra Pradesh, Bihar, Madhya Pradesh, Maharashtra, Punjab, Tamil Nadu and West Bengal. M. Atchi Reddy has noted that in Nalgonda district of Andhra Pradesh, the wage rate of ploughman declined during 1950 to mid-1970s and increased thereafter. The wage paid in kind was higher than that of cash wage. However, this is not so if hourly wage rate is considered. Both the minimum and average wage rate of agricultural labourers increased over the years. Real minimum wage in the post-green revolution period was higher than that during the pre-green revolution period. The study on wages and employment in Mahabubnagar district of Andhra Pradesh by Goutham and J. Krishnaiah showed that farm employment was available for 164, 144 and 131 days per year for male, female and child labour respectively. Employment in non-farm activities accounted for 60 days. Employment and average wages were higher in irrigated areas as compared to unirrigated tracts. It is observed that there is lack of employment opportunities in both farm and non-farm activities. According to A. Janaiah and V. Kiresur, one hectare of hybrid rice seed production could provide an additional employment of 260 man-days for women and 10 man-days for men. This is due to the special operations to be performed in hybrid rice seed production. It is also a profitable one with a return per rupee investment as Rs. 2.90. The study on employment, wages and income of agricultural labourers in Bagdah block of West Bengal by Debnarayan Sarker revealed that the economic conditions of pure tenants are worse off than the landless agricultural labourers. Non-agricultural wage work is insignificant in relation to agricultural wage work. There is under-employment and low income among landless tenants. The study suggests security right in leasehold land. M.S.

Jairath has noticed that both the minimum and average wage of agricultural labourers increased in all the states between 1967-68 and 1983-84. Real wages increased continuously during the peak periods of agricultural operations. There existed variation in real wages among the states both during pre- and post-green revolution periods. Real average wage and real minimum wage do not present an encouraging relationship.

Wages, Production and Productivity

Money wages in Karnataka increased both during pre-green revolution and post-green revolution periods though the growth rate in real wage was not impressive,according to R.V. Dadibhavi and S.S. Masali. Increase in the demand for labour tended to increase employment rather than wage. The new technology resulted in rise in wages and employment. The relationship between real wages and production/productivity was not encouraging. Bant Singh *et al.* have argued that factor productivity and labour demand increased in all the three agro-climatic zones of Punjab during the post-green revolution period but wages at constant prices declined. In the green revolution era, small and marginal farmers have become agricultural labourers. There is no relationship between wages and productivity. The analysis of money wage rate across different agro-climatic zones by Jayanti Ghanekar revealed that except in zones 6 and 12, where money wage rate was high due to high productivity, in other zones money wage rate did not show much variation. Generally, there is a positive relationship between density of male agricultural labourers and money wage rate. Money wage rate varied significantly within a zone if it had more number of states. Nearly 34 per cent of labour required for crop farming in humid plains of Rajasthan was met by job contract form of labour, followed by family labour (32 per cent), according to K.A. Varghese and P.M. Sharma. The share of family labour was high on small farms. On farms operated with annual servants, which ensured regular supply of labour, the wheat productivity was higher. Job contract is seasonal and wage income is earned during certain peak periods only.

Impact of Technology on Employment

Introduction of any new production technology is expected to shift the production surface upward resulting in higher output and income directly along with more additional employment generation. Shaik Saleem *et al.* have observed that the extent of labour used per acre decreased as the size of farm increased in Ranga Reddy district of Andhra Pradesh. The employment function to assess the impact of dryland technology showed that the contribution of fertiliser application to employment was relatively higher than that of the other variables. Gross income of the farm had a negative influence on employment. Government has launched a number of programmes to increase the income of the weaker section of the population. Poverty alleviation programmes aimed at increasing the employment opportunities and thereby the income of the people. A study in Birbhum district of West Bengal on the impact of IRDP and JRY on agricultural labourers by D.K. Ghosh has revealed that though only 10 per cent of the families could cross the poverty line, 70 per cent of them were able to improve their living standards. The IRDP did not help significantly in the acquisition of additional assets. The JRY does not ensure continuous and adequate employment. The author has emphasised the need for linkage between self- and wage employment opportunities.

Income and Levels of Living

In the tea plantations of Himachal Pradesh, employment of female labour was found to be uneven but distributed throughout the year, according to R.K. Sharma *et al.* Female labour employment in the non-agricultural sector was very low. Of the gross household income, income from tea labour was 33 per cent, followed by service (21 per cent), off-farm labour (19 per cent) and agriculture (16 per cent). Nearly 72 per cent of the consumption expenditure was on food, revealing their low standard of living. A.K. Gauraha and S.P. Gupta have observed that about 60 per cent of the females in the selected families were working in Raipur district of Madhya Pradesh. Employment in own farm was higher in tubewell irrigated farms than in canal irrigated farms. There was no involvement of females in non-agricultural works. Income per family was higher in tubewell farms. The families had net savings in the study area. The prevailing wage rate was only 50 per cent of the minimum wage rate. In Gwalior district of Madhya Pradesh, V.N. Singh and A.M. Jaulkar have reported that on small farms, people had employment for 210 days per member and it was only 182 days per agricultural labourer. Non-agricultural labourers received higher family income, followed by small farmers and agricultural labourers. There is migration of labour from agriculture to non-agriculture due to higher employment, high income and low physical exertion. The study on employment and income of agricultural labourers in Agra district of Uttar Pradesh by Balishter *et al.* revealed that 47 per cent of the agricultural labour families were benefited by IRDP. Assets were found intact for 53 per cent of the beneficiaries mostly in the case shoe-making and buffaloe beneficiaries. Per worker employment was 245 days for IRDP beneficiaries. The beneficiary families had 16 per cent higher income than the non-beneficiaries.

Gender Difference in Work Participation

Gender difference in agricultural wage is examined in the developed and less developed districts of Haryana by Satnam Kaur and S.K. Goyal. Nearly 78 per cent of the economically active women were engaged in agriculture. Female agricultural labour force increased between 1961 and 1991. There existed significant difference in the wages paid to females and males for different agricultural operations. The earnings of the female agricultural labour was below the poverty line. Generally, females were paid in kind. Activities involving females were mostly paid on piece rate basis.

Employment in Agricultural and Non-Agricultural Sectors

The study of pattern of employment in agricultural and non-agricultural sectors in Ghaziabad district in Uttar Pradesh by Bindhyachal Singh and K.P. Singh showed that agriculture provided employment for 220 days in a year. Employment was higher for agricultural labourers without land than for those with land. Similarly, the non-agricultural sector provided employment for 58 days. In agriculture, employment was more in the *rabi* season than in the *kharif* season. Wage employment formed 73 per cent of the total employment of agricultural labourers. Gian Kaur has found that the work participation of females engaged in cultivation increased between 1981 and 1991 in Gurdaspur district of Punjab. Female agricultural labourer received wages in kind and on piece rate according to the nature of work. Income from family agricultual labour force formed 50 per cent of the

total family income. A similar trend was noticed with female non-agricultural labourers also. Female labourers got 75 per cent of the wages received by males. Female non-agricultural labourers received lower wages than male non-agricultural labourers in the various works like tailoring, canning chairs, carpet weaving, etc.

Agricultural and Industrial Wages

K.N. Rai *et al.* have analysed the spatial-temporal variation in agricultural and industrial wages in northern, southern, eastern and western regions of the country. The green revolution had positive impact on agricultural wages. No sizeable increase in the average real wage was observed during the green revolution period. The average industrial wage rate was also found to be high during the green revolution period. The real wage for industrial workers also increased significantly over the years. No conclusive inference could be drawn on the impact of agricultural development on real wages across the states and sectors.

Issues for Discussion

Based on the review of the papers, the following issues are identified for discussion in the Conference.

1. What is the real position regarding dichotomy of unemployment in the rural areas and non-availability of labour during peak seasons in agriculture?
2. What is the minimum wage required to keep the labourers in agriculture and how it could be decided and implemented?
3. The role of agro-processing in generating employment and income in the rural areas.
4. The scope for selective mechanisation to reduce drudgery.
5. The need for skill development of agricultural labourers for improving their efficiency.
6. The role of post-harvest technology in increasing employment in the rural areas.
7. What is the effect of new technology in agriculture especially during the 1990s in the context of stabilised green revolution?
8. The need to orient development/welfare programmes to increase the employment generation in agriculture.
9. Is there scope for increased self-employment in rural areas?
10. How to bridge the gap in gender difference in wages and level of employment?
11. What could be the combination of agricultural and non-agricultural employment to get higher income with the simultaneous development of both the sectors with eco-friendly concept?
12. What is the extent and type of migration and its impact on agricultural production?
13. New economic/agricultural policy and its implication for rural employment.
14. Effect of unionisation of agricultural labourers on employment and income and farm productivity.